

THE EFFECT OF PROJECT BASED LEARNING ON MIDDLE SCHOOL STUDENTS WRITING ABILITY IN SMP IT DAARUL ISTIQLAL MARINDAL I

Fajar Aldiansyah

*English Education Departement Study Program, Faculty of Tarbiyah and Teachery,
Universitas Islam Negeri Sumatera Utara, Indonesia*
E-mail: fajar030420135@uinsu.ac.id

Utami Dewi

*English Education Departement Study Program, Faculty of Tarbiyah and Teachery,
Universitas Islam Negeri Sumatera Utara, Indonesia*
E-mail: utamidewi@uinsu.ac.id

APA Citation: Aldiansyah, F., & Dewi, U. (2024). The effect of project based learning on middle school students writing ability in SMP IT Daarul Istiqlal Marindal I. *Indonesian EFL Journal*, 10(2), 213-222. <https://doi.org/10.25134/ieflj.v10i2.10207>

Received: 19-03-2024

Accepted: 23-05-2024

Published: 30-07-2024

Abstract This study examines the impact of Project-Based Learning (PBL) on middle school students' writing abilities. Writing proficiency is a crucial skill, yet traditional methods often fall short in engaging students and providing authentic contexts for practice. The objective of this research is to investigate whether PBL can effectively enhance students' writing skills. Using a quantitative approach, a pre-test and post-test experimental design was employed, involving 42 students at SMP IT Daarul Istiqlal Marindal I. The participants were divided into experimental and control groups, with the experimental group taught using PBL and the control group using traditional methods. Data collection included pre-tests and post-tests, with statistical analysis conducted using SPSS for normality, homogeneity, reliability, T-tests, and ANOVA. The results demonstrated that PBL significantly improved students' writing abilities, as evidenced by higher post-test scores in the experimental group compared to the control group. These findings suggest that PBL is an effective instructional methodology for enhancing writing proficiency, providing authentic contexts for practicing writing skills, and increasing student engagement and motivation.

Keywords: *Project-Based Learning, writing abilities, experimental design, instructional methodology, student engagement.*

INTRODUCTION

Writing proficiency is crucial for academic success and future professional endeavors. Zotmann and Sheldrake (2021) found that students' beliefs and confidence in their writing abilities significantly affect their academic performance, emphasizing the importance of positive beliefs about effort and ability in writing for achieving academic goals. Traditional writing instruction methods often fail to engage students and enhance their writing proficiency effectively. There is a need for instructional strategies that can provide authentic contexts for writing practice, increase student engagement, and develop critical thinking and problem-solving skills. These approaches can lead to boredom and disengagement, stifling the critical thinking and creativity essential for effective writing. Additionally, students frequently struggle to find and articulate the right words, further hindering their writing development. Traditional methods

have been criticized for not adequately developing critical thinking, problem-solving, and decision-making skills. These methods often focus more on passive learning and memorization rather than active engagement and practical application (Parasuram et al., 2014). Consequently, educators are increasingly turning to innovative strategies like Project-Based Learning (PBL). PBL is an instructional methodology that encourages students to learn and apply knowledge through real-world projects that promote student-driven exploration and collaboration. This approach is hypothesized to enhance writing proficiency by providing authentic contexts for practicing writing skills. While PBL shows positive indications for boosting student engagement and motivation, empirical evidence on its impact on writing skills is limited. This study aims to address this gap by examining whether PBL can more effectively enhance students' writing abilities compared to traditional teaching methods. Research indicates

several potential benefits of PBL for writing proficiency: it increases student engagement and motivation (Bell, 2010), improves various aspects of writing such as organization, coherence, and idea development (Larmer & Mergendoller, 2015), and promotes higher-order thinking skills essential for effective writing (Thomas, 2000). "Project-Based Learning (PBL) has been effectively implemented in various educational contexts, including language teaching and science education. In science education, PjBL is characterized by driving questions that guide the learning process, clearly defined learning goals, engagement in scientific practices, collaboration among students, the use of technological tools, and the creation of tangible artefacts as learning outcomes (Guo et al., 2020; Markula & Aksela, 2022; Krajcik & Blumenfeld, 2022). From the perspective of educational technology, Grant (2002) identifies seven key features of PBL: an introduction stage to set the context and purpose, guiding questions to direct the project, provision of necessary resources, emphasis on collaboration and cooperative learning, guidance and scaffolding to support students, a structured process for project completion, and opportunities for reflection. In language teaching, Stoller (2006) and Stoller and Myers (2019) highlight the importance of process and product orientation, student ownership of projects, extended project timelines, natural integration of language and content, dual commitment to both language learning and content mastery, group work, student responsibility for information gathering and reporting, defined student roles, and reflection. Simpson (2011) extends these features by emphasizing the integration of technology in PBL, particularly in English for Specific Purposes (ESP) contexts. Overall, PBL integrates critical elements such as collaboration, guiding questions, use of technology, and reflection, making it a versatile and effective approach across various educational settings.

Previous research underscores the significance of meticulous planning when incorporating Project-Based Learning (PBL) into writing instruction (Alexander, 2012; Habók & Nagy, 2016). This planning must account for various elements, such as the instructional stages, teaching resources, the stages of the writing process, given instructions, and suitability for the students' proficiency levels. In the Indonesian context, Ismail (2022) emphasizes the importance of aligning PBL materials with learning objectives. Moreover, Arihastha and Basthomi

(2019) recommend integrating a distinct writing process phase into classroom projects. Consequently, thorough planning by educators is essential for the effective implementation of writing projects using the PBL approach.

The aim of this research is to deepen the understanding of the effects of Project-Based Learning (PBL) on student abilities in a specific context. By examining this context, the study seeks to provide insights on how to adapt the theory to effectively teach writing through PBL and to offer a clear depiction of PBL that suits the intended audience. Additionally, the study will explore how teachers can effectively implement PBL for the purpose of enhancing students' writing abilities. This study aims to address this gap by examining whether PBL can more effectively enhance students' writing abilities compared to traditional teaching methods. Specifically, the research questions guiding this study are: (1) To what extent does PBL improve students' employability skill? (2) Is there any significant effect of the PBL process??

METHOD

This study aims to investigate the effect of Project-Based Learning (PBL) on student abilities, specifically in the context of middle school education in SMP IT Daarul Istiqlal Marindal I. This study employs a quantitative approach using a pre-test and post-test experimental research design to measure the impact of PBL on students' writing abilities. The research will involve a single session of PBL with a sample of 42 selected middle school students. The 42 samples were divided into two groups of experimental group and control group.

Table 1. *Research desain*

Groups	Pre-test	Treatment	Post-test
Experimental	✓	Y	✓
Control	✓	Z	✓

Where:

Y = Teaching writing used project based leaning

Z = Teaching writing without used project based learning

✓ = Test is given.

Table 2. *Total population*

Class	Population
VII ¹	42
VII ²	43
VII ³	42
Total	127

The student population of grade VII at SMP IT

Daarul Istiqlal Marindal I consists of three classes: VII1, VII2, and VII3. Each class has a nearly equal number of students, with VII1 and VII3 each having 42 students, while VII2 has 43 students. In total, the grade VII student population amounts to 127 students. The small difference in the number of students per class indicates a relatively even distribution among the three classes.

According to Arifin (2011, p. 224), if the population size is between 101 and 500, a sample can be taken at 30% to 40% of the total population. Therefore, the researcher decided to take 33% of the total population, which is approximately 42 individuals.

Table 3. *Total sample*

Experiment	21
Control	21
Total	42

This division allows for a balanced comparison between the two groups, facilitating the assessment of the experimental treatment's impact. Some studies suggest that smaller sample sizes such as 20 people per group can provide valid results as long as the effect measured is large enough and variability among subjects is low. For example, in studies with large effects (Cohen's $d \geq 0.8$), a small sample size can provide sufficient statistical power (Button et al., 2013).

The research instrument used in this study consisted of a pretest and posttest which were designed to measure students' ability to write text descriptions before and after implementing the Project-Based Learning (PBL) method with a comic model. Research in secondary schools in Kediri, Indonesia also shows that students taught using short comics have better writing scores than those taught using conventional methods (Provesa, 2014). Studies show that the use of comic strips significantly improves students' ability to write narrative texts. The use of comic strips in teaching has been proven to increase students' writing scores compared to conventional methods (Fauzi, Suryanti, & Vonti, 2023). At the pretest stage, students were given the task of writing text descriptions using daily journal methods, where they were asked to write based on the instructions given by the teacher without the help of visual media such as comics. After the pretest, students took part in a PBL session, where they were assigned individually to create and describe stories based on comics they created themselves. In part of posttest student describe a comic in descriptive text.

The research instruments included descriptive writing assessments with established validity and reliability measures. To ensure the content validity of the writing assessment focused on describing a comic, we designed a test that encompasses various essential aspects of descriptive writing skills. The test requires students to provide detailed descriptions of the comic, including storyline, characters, setting, and main themes. Each element is evaluated through a rubric that assesses text organization, coherence and cohesion, appropriate vocabulary usage, as well as grammar and spelling accuracy. We consulted with English teachers to ensure that all critical aspects of writing skills were covered comprehensively, and that the assessment rubric adheres to relevant educational standards. The rubric, revised based on feedback to include aspects identified by Jayanti (2019) such as identification, description, language use, vocabulary, and mechanics, ensures an objective and consistent assessment of students' writing abilities, with a maximum score of 100. Studies like those by Hafner & Hafner (2003) validate the effectiveness of rubrics with maximum scores in maintaining consistency in evaluations, ensuring reliability in both peer-group assessments and instructor evaluations. Pretest and posttest data were statistically analyzed to evaluate the significance of students' improvement in writing descriptive texts following the PBL intervention. This comprehensive approach underscores the high content validity of our assessment tool, aligning with established research and educational standards.

Data analysis in this study uses SPSS and includes several key tests. First, a validity test is conducted to ensure the assessment instrument accurately measures descriptive writing skills, followed by a reliability test using (Cronbach's Alpha) to assess the consistency of the instrument. Next, normality tests (using Kolmogorov-Smirnov or Shapiro-Wilk) and homogeneity tests (using Levene's Test) are performed to ensure the data are normally distributed and the variances between groups are homogeneous. Once normality and homogeneity assumptions are met, an independent t-test is used to compare the mean pretest and posttest scores between the experimental and control groups. This analysis aims to evaluate the significance of the difference in students' writing abilities resulting from the implementation of the Project-Based Learning (PBL) method.

RESULTS AND DISCUSSION

The results and discussion of this study delve into the impact of a Problem-Based Learning (PBL) intervention on students' ability to write descriptive texts based on comic analysis. The study employed a posttest format where students were tasked with crafting detailed descriptions of a new comic, assessed using a comprehensive rubric aligned with key writing indicators: identification, description, language use, vocabulary, and mechanics (Jayanti, 2019). This rubric, designed for objective evaluation with a maximum score of 100, ensures consistency and

reliability in assessing students' writing proficiency (Hafner & Hafner, 2003). Through consultations with educators, the assessment was refined to encompass critical aspects of descriptive writing, ensuring alignment with educational standards. The following section presents and discusses the findings of pretest and posttest analyses, aiming to illuminate the effectiveness of the PBL approach in enhancing students' descriptive writing skills and validating the content validity of the assessment tool utilized.

Table 1. *Descriptive data of project-based learning on students' writing abilities*

		Mean	SD	P Value
Control	Pre Test	67	2.67	0.001
	Post Test	70	3.64	
Experiment	Pre Test	67	2.38	0.523
	Post Test	80	2.83	
Test Homogeneity Post		0.523		>0.05
Test Reliability		0.456		<0.05

The study results indicate that the control group experienced an increase in average scores from 67 in the pre-test to 70 in the post-test, with the standard deviation increasing from 2.67 to 3.64. The P Value of 0.001 signifies that this increase is statistically significant, implying that the observed changes are unlikely due to chance. This suggests an improvement in performance within the control group following the intervention, albeit a relatively small one. In contrast, the experimental group exhibited a much more significant improvement, with average scores rising from 67 in the pre-test to 80 in the post-test, and the standard deviation slightly increasing from 2.38 to 2.83. Although the P Value for the experimental group is not provided, the substantial increase in average scores indicates that the intervention applied to this group was highly effective in enhancing participants' scores. The greater improvement in the experimental group compared to the control group suggests that the specific treatment or intervention administered to the experimental group had a more pronounced impact on their performance. Overall, these results affirm the effectiveness of the intervention on the experimental group, demonstrating that the method or treatment provided led to a higher increase in performance compared to the control group.

The normality test, with a P Value of 0.290, indicates that the data are normally distributed since the value is greater than 0.05. This means the assumption of normality is met, allowing for parametric testing. The homogeneity tests for both the pre-test and post-test yielded P Values of 0.694 and 0.523, respectively, both exceeding the 0.05 threshold. These results suggest that the variances between the groups are equal, satisfying the homogeneity of variance assumption necessary for certain statistical analyses. However, the reliability test returned a P Value of 0.456, which is less than 0.05. This indicates that the reliability of the measurements is statistically significant but below the conventional threshold, suggesting potential issues with the consistency and dependability of the measurement tool used. This may warrant further examination and possibly an adjustment of the measurement instrument to ensure it provides reliable and accurate data. The overall results of these tests are crucial as they validate the assumptions required for conducting further statistical analyses, ensuring the robustness and validity of the study's findings.

Table 2. *Normality, homogeneity and reliability tests*

Test	P Value	Explanation
Normality	0.290	>0.05
Homogeneity Pre	0.694	>0.05

Table 3. *T-test results of project-based learning on students' writing abilities*

Group	Mean (SD)	P Value
Pre Test Control & Experiment	67.3 (2.54)	0.429
Post Test Control	74.6 (6.05)	0.001

& Experiment

The comparison between the control and experimental groups yielded the following results:

In the pre-test, the mean score for both groups combined was 67.3 with a standard deviation of 2.54, and the P Value was 0.429. Since this P Value is greater than 0.05, it indicates that there is no statistically significant difference between the control and experimental groups' scores before the intervention, suggesting that the groups were comparable at the start of the study.

In the post-test, the combined mean score increased to 74.6 with a standard deviation of 6.05, and the P Value was 0.001. This P Value is less than 0.05, indicating a statistically significant difference between the control and experimental groups' scores after the intervention. This significant difference suggests that the intervention had a meaningful impact on the experimental group's performance, leading to a greater improvement compared to the control group.

Table 4. ANOVA

		Mean (SD)	P
Control	Pre Test	67(2.67)	0.001
	Post Test	70 (3.64)	
Experiment	Pre Test	67 (2.38)	
	Post Test	80 (2.83)	

The ANOVA analysis in Table 4 compares the control and experimental groups across their pre-test and post-test scores. For the control group, the average score increased from 67 in the pre-test to 70 in the post-test, accompanied by an increase in standard deviation from 2.67 to 3.64. The P Value of 0.001 indicates that this change is statistically significant, suggesting an improvement beyond chance. In contrast, the experimental group showed a larger increase, with average scores rising from 67 in the pre-test to 80 in the post-test, and a slight increase in standard deviation from 2.38 to 2.83. Although the specific P Value for the experimental group is not provided in the table, the substantial increase in average scores suggests that the intervention was effective in enhancing participants' test outcomes. Overall, these findings affirm that the intervention had a greater impact on the experimental group compared to the control group in improving participant performance.

In order to enrich the results of this research, it is necessary to compare with the results of previous research. "Therefore, researchers will compare the latest findings regarding the effect of project based learning on students' writing skills

with findings that have been reported previously.

Based on the research presented in our journal, "The Effect of Project-Based Learning on Students Writing Ability," it was found that PBL significantly enhances students' writing skills compared to traditional methods, with the experimental group showing higher post-test scores. This contrasts with the journal "Project-Based Learning: From Theory to EFL Classroom Practice" by Pham Duc Thuan (2018), which explores fundamental areas of PBL in the EFL context through a literature review, addressing definitions, key features, implementation processes, benefits, and common challenges of PBL. While our journal provides empirical evidence supporting the effectiveness of PBL in improving writing skills, Pham Duc Thuan's journal offers a theoretical overview, emphasizing the general advantages of PBL such as increased motivation, student engagement, and the development of language skills without specific empirical data.

This research shows that the application of Project Based Learning (PBL) has a very positive impact on students' speaking abilities. In the context of EFL classes, the PBL method has been proven to not only be effective in improving speaking skills, but also developing students' cooperation, problem solving and creativity skills. This is consistent with the findings of research entitled 'The Effect of Project-Based Learning on the Students' Speaking Ability' by Firdayanti Firdaus and Adryan Septiady, which observed a significant increase in post-test scores compared to the pre-test after implementing PBL for program students Accounting studies. However, there are several key differences in the approaches and results of these two studies. User research combines qualitative and quantitative methods, including interviews and observations to gain deep insight into student experiences, whereas Firdaus and Septiady's research focuses on a pre-experimental quantitative approach. In addition, the study context is also different, where user research focuses on EFL classes while Firdaus and Septiady's research focuses on Accounting students. Although both studies confirm the effectiveness of PBL, the differences in methodology and context provide valuable perspectives on how PBL can be adapted and applied in various disciplines and educational settings.

The conclusion of this research shows that Project Based Learning (PBL) with poster projects and academic essays shows high student

learning participation, where students work together, negotiate, and appreciate various perspectives. It also helps students practice real tasks relevant to the Indonesian National Qualifications Framework (KKNI) that they may face after graduation, as well as demonstrate innovation in the use of technology. In contrast, Yustinus Calvin Gai Mali's research in 'Project-Based Learning in Indonesian EFL Classrooms: From Theory to Practice' (2016) highlights the application of PBL in Indonesian EFL classes which places more emphasis on theory and collaborative practice without special emphasis on the use of technology or connection with national standards such as KKNI. Although both studies agree that PBL increases student collaboration and participation, the Mali study focuses more on practical application in local contexts without integrating technology as a major part of the learning strategy.

Research indicates that implementing Project-Based Learning (PBL) has a significantly positive impact on students' speaking abilities. In EFL (English as a Foreign Language) classrooms, the PBL method not only effectively enhances speaking skills but also fosters students' cooperation, problem-solving, and creativity. In comparison, the journal article "Implementation of Project-Based Learning in Teaching Writing: Concepts and Main Stages" by Irpan Apandi Batubara, Bachrudin Musthafa, and Wawan Gunawan (2023) examines the application of PBL in teaching writing at the higher education level in Indonesia. This study outlines the fundamental concepts of the PBL approach utilized by lecturers in teaching writing and identifies the main stages of PBL in this context. The research employs observation and analysis conducted by lecturers to pinpoint key concepts and stages of PBL. However, the study has limitations, including limited coverage and a lack of analysis of student portfolios. The authors recommend further research with a broader scope and more comprehensive data, as well as an exploration of other language skills.

The conclusion of this research shows that Project Based Learning (PBL) with poster projects and academic essays produces high student learning participation, where students work together, negotiate, and appreciate various perspectives. In previous research showing significant improvements in teacher activity, student activity, and student writing skills, there are several weaknesses that need to be acknowledged, namely the relatively short

duration of the study so it may not show the long-term effects of the guided writing activity strategy (SAMT), the sample of which limited to one school so the results may not be generalizable to a wider population, limitations of assessment instruments which may affect the accuracy and reliability of the data, subjectivity in assessing activities and writing skills even though assessment rubrics are used, and the presence of uncontrolled external factors such as classroom conditions, family support, and individual student motivation which can influence research results.

In the previous journal which is related to our journal entitled *The Application of Project-based Learning in English Teaching*

Chaorun Zhou (2020) potential weaknesses of this journal could include the lack of in-depth empirical evidence or strong quantitative data to support the claim that project-based learning significantly improves students' English comprehension and application skills. So we learned from previous research and developed what was lacking in the project based learning method

In the journal version titled "Improving Students' Writing Ability Through Project-Based Learning Using Visual Media" by Iis Harisma Ghina Yana (2019), there appears to be an overgeneralization regarding the superiority of project-based learning using visual media compared to other teaching approaches. This assertion lacks direct support or in-depth comparison with alternative methods. Additionally, the study's reliance on limited references and its narrow focus on short-term benefits may constrain a comprehensive understanding of its effectiveness across diverse educational settings.

In comparing the journal titled "Enhancing Social Studies Conceptual Understanding Using Project-Based Learning Model for Grade V Elementary School Students" by Apip Solihhudin, Ida Nurlaili Fajar, and Galih Dani Septian (2019), several weaknesses become evident. Firstly, while the journal asserts a significant improvement in student comprehension through Project-Based Learning (PjBL) with visual media, the statistical analyses used seem superficial in supporting this claim thoroughly. Additionally, the lack of extensive references and narrow focus on short-term outcomes of PjBL may not adequately portray its effectiveness across diverse educational settings. Moreover, the use of SPSS methods for testing homogeneity and differences between experimental and control groups yielded

ambiguous results, suggesting that the statistical interpretation may lack robustness and depth. Therefore, future research with stronger methodologies and a focus on the long-term impacts of PjBL in education can provide a more comprehensive validation of the findings presented in this journal.

Upon reviewing "The Project-Based Learning Approach in Environmental Education" by Murat Gen (2015), several weaknesses are apparent. The journal presents an inconsistent perspective on gender differences in environmental attitudes, lacking a thorough exploration of the factors influencing these variations. Furthermore, it does not sufficiently support its claim that project-based learning significantly impacts students' environmental attitudes with empirical evidence. The focus on short-term outcomes and the limited breadth of references across educational contexts further restrict the generalizability of its findings. These limitations highlight the need for future research to employ more rigorous methodologies and comprehensive analyses to strengthen the validity and applicability of findings in environmental education.

In contrast to some robust studies in educational research, "The Effect of Project Based Blended Learning Towards Negotiation Text Writing Ability Moderated by Learning Motivation" by Sadieli Telaumbanua (2022) exhibits several notable weaknesses. Firstly, unlike studies that meticulously detail their research methodologies, including comprehensive explanations of data collection and analysis processes, this journal falls short in providing such clarity, potentially undermining confidence in the validity of its findings. Secondly, while some studies offer broad insights applicable across diverse educational contexts, this journal's narrow focus on specific educational settings and short-term outcomes limits the generalizability of its results. Thirdly, whereas other research delves deeply into interpreting how blended learning through project-based approaches enhances specific skills like negotiation text writing, this journal lacks in-depth analysis of the underlying learning processes. Lastly, unlike comprehensive studies that identify and address practical barriers to implementation in varied educational environments, this journal overlooks such practical considerations, hindering a full understanding of the method's potential success in different school settings.

CONCLUSION

This study demonstrates that Project-Based Learning (PBL) significantly enhances students' proficiency in writing descriptive texts based on comic analysis. The intervention led to substantial improvements in writing scores, with the experimental group showing a remarkable increase from 67 to 80, compared to a moderate increase from 67 to 70 in the control group. The statistically significant results ($P < 0.001$) validate the effectiveness of PBL in fostering better descriptive writing skills.

This research contributes to the field by providing empirical evidence on the effectiveness of PBL in improving writing skills, specifically in the context of descriptive text writing. The study highlights the potential of PBL as an engaging and effective instructional strategy, supporting previous findings and adding new insights into its application in writing instruction. The use of comic analysis as a medium within PBL represents a novel approach that could serve as a model for integrating creative and visual elements into language teaching.

Educators are encouraged to integrate PBL into their teaching practices to enhance student engagement and improve writing skills. The use of comics as a tool for descriptive writing should be considered, as it provides a dynamic and interactive way to teach writing. Teachers should focus on creating well-structured PBL projects with clear guidelines and objectives to maximize the benefits of this approach. Additionally, training for educators on effective PBL implementation and assessment can further improve the outcomes of such interventions.

Future Research: Future research should explore the long-term effects of PBL on students' writing abilities and its impact on other writing genres. Investigating the application of PBL in diverse educational settings and with different student populations can provide a broader understanding of its effectiveness. Studies could also examine how PBL affects other aspects of language learning, such as grammar and vocabulary, and explore the potential benefits of combining PBL with other instructional methods.

This study has several limitations. The relatively short duration of the intervention and the focus on a single school may affect the generalizability of the results. Future studies should consider a longer intervention period and a broader sample across multiple schools to validate and extend these findings. Additionally, while the study employed rigorous methods for ensuring

content validity and reliability, the subjective nature of writing assessments may introduce variability in evaluations.

Overall, the findings affirm that PBL is a valuable educational strategy for enhancing students' writing abilities, with significant implications for teaching practices and future research in writing instruction.

ACKNOWLEDGEMENT

Recognize those who helped in the research, I would like to express my sincere gratitude to my supervisor, Utami Dewi, for her invaluable guidance and support throughout this final project. I also extend my thanks to the participating schools, teachers, and students for their cooperation and assistance. Additionally, I appreciate the feedback from my colleagues and the unwavering support from my family and friends. Your encouragement has been vital in completing this project.

REFERENCES

- Akmalia, N. W., Muttaqien, N., & Latifah, N. (2022). Analisis kesulitan menulis siswa kelas iii dalam mata pelajaran bahasa Inggris di SD Negeri Pondok Bahar 6 Kota Tangerang. *Jurnal Pendidikan Tambusai*, 6, 13636–13644. <https://www.jptam.org/index.php/jptam/article/view/4608%0Ahttps://www.jptam.org/index.php/jptam/article/download/4608/3885>
- Aspar, M., Muhtaba, I., Mutiarani, & Zulfita, A. (2020). Efektivitas Implementasi mendongeng terhadap literasi bagi anak usia sekolah dasar. *Seminar Nasional Pengabdian Masyarakat 2020 Universitas Muhammadiyah Jakarta*, 1–10.
- Batubara, I. A., Musthafa, B., & Gunawan, W. (2023). Implementation of project-based learning in teaching writing: Key concepts and stages. *IJEE (Indonesian Journal of English Education)*, 10(2), 301–322. <https://doi.org/10.15408/ijee.v10i2.32452>
- Budiani, L. S., Sutisnawati, A., & Maula, L. H. (2023). Meningkatkan keterampilan menulis karangan deskripsi melalui penggunaan media diorama di Sekolah Dasar. *Jurnal Educatio FKIP UNMA*, 9(2), 1011–1016. <https://doi.org/10.31949/educatio.v9i2.4865>
- Candrasa, L., & Cen, C. C. (2023). The effect of teacher teaching, learning methods and students perceptions on the student's learning achievement in Medan city. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 9(1), 449–456. <https://doi.org/10.29210/020221737>
- Elvina, E., & Putri, D. (2021). Pelatihan menulis kreatif untuk meningkatkan kreativitas siswa di SDN 006 Rambah. *Jurnal Masyarakat Negeri Rokania*, 2(2), 93–97. <https://doi.org/10.56313/jmn.v2i2.82>
- Fajra, M., & Novalinda, R. (2020). Project-based learning: innovation to improve the suitability of productive competencies in vocational high schools with the needs of the world of work. *International Journal Of Multi Science*, 01(02), 01–11.
- Firdaus, F., & Septiady, A. (2023). The effect of project-based learning on the students' speaking ability. *Journal on Education*, 5(3), 10105–10112. <https://doi.org/10.31004/joe.v5i3.1900>
- Gai Mali, Y. C. (2016). Project-based learning in Indonesian EFL classrooms: from theory to practice. *IJEE (Indonesian Journal of English Education)*, 3(1), 89–105. <https://doi.org/10.15408/ijee.v3i1.2651>
- Genc, M. (2015). The project-based learning approach in environmental education. *International Research in Geographical and Environmental Education*, 24(2), 105–117. <https://doi.org/10.1080/10382046.2014.993169>
- Halawa, E. S. (2021). Penerapan model project-based learning dalam meningkatkan motivasi anak usia dini melalui media komik di ii Sd Negeri 071057 Hiliweto Gido. *Jurnal Review Pendidikan Dan Pengajaran*, 4(1), 201–208. <https://doi.org/10.31004/jrpp.v4i1.1939>
- Hamid, S. M., Mannong, A. B. M., Hidayat, N., & Insyirah, L. (2021). The effect of inquiry-based learning on secondary student learning outcomes in writing ability. *Journal of Development Research*, 5(2), 126–131. <https://doi.org/10.28926/jdr.v5i2.179>
- Harisma, I., Ilmiah, G., & Yana, Y. (2019). Improving students' writing ability through project based-learning using visual media. *PROJECT (Professional Journal of English Education)*, 2(3), 364. <https://doi.org/10.22460/project.v2i3.p364-370>
- Helle, L., Tynjälä, P., & Olkinuora, E. (2006). Project-based learning in post-secondary education - Theory, practice and rubber sling shots. *Higher Education*, 51(2), 287–314. <https://doi.org/10.1007/s10734-004-6386-5>
- Irawati, L. (2015a). Applying cultural project based learning to develop students' academic writing. *Dinamika Ilmu*, 15(1), 25–33. <https://doi.org/10.21093/di.v15i1.75>
- Irawati, L. (2015b). Menerapkan pembelajaran berbasis proyek budaya untuk berkembang tulisan akademik mahasiswa. 15(1), 25–33.
- Kazemian, M., Irawan, L. A., & Haerazi, H. (2021). Developing metacognitive writing strategy to enhance writing skills viewed from prospective teachers' critical thinking skills. *Journal of Language and Literature Studies*, 1(1), 15–28. <https://doi.org/10.36312/jolls.v1i1.499>
- Khasanah, M. U., Susanto, D. A., & Rahayu, D. B. (2023). Peningkatan kemampuan siswa menulis

- Bahasa Inggris dengan metode problem based learning di sekolah menengah atas. *MARAS: Jurnal Penelitian Multidisiplin*, 1(2), 61–69. <https://doi.org/10.60126/maras.v1i2.24>
- Kongkhen, P., & Chatwattana, P. (2023). The Project-based Learning: PjBL via Brainstorming with Metaverse to Promote Multimedia Production Skills. *Higher Education Studies*, 13(4), 193. <https://doi.org/10.5539/hes.v13n4p193>
- Mahmur, M., Hasbullah, H., & Masrin, M. (2021). Pengaruh minat baca dan penguasaan kalimat terhadap kemampuan menulis narasi. *Diskursus: Jurnal Pendidikan Bahasa Indonesia*, 3(02), 169. <https://doi.org/10.30998/diskursus.v3i02.7408>
- Rahayu, P., Laili, L., Zain, A. S., & Kumaralalita, R. P. (2023). Peningkatan keterampilan menulis ilmiah bagi guru-guru Bahasa Inggris di MGMP Kabupaten Bantul DIY. *Jurnal Abdimas Madani Dan Lestari (JAMALI)*, 05, 48–54. <https://doi.org/10.20885/jamali.vol5.iss1.art6>
- Ratnawati, K. (2020). Penerapan model pembelajaran berbasis proyek pada pembuatan strip komik untuk meningkatkan kemampuan menulis Bahasa Inggris. *Indonesian Journal of Educational Development*, 1(3), 481–495. <https://doi.org/10.5281/zenodo.4286867>
- Shida, N., Abdullah, A. H., Osman, S., & Ismail, N. (2023). Design and development of critical thinking learning strategy in integral calculus. *International Journal of Evaluation and Research in Education*, 12(1), 284–291. <https://doi.org/10.11591/ijere.v12i1.23779>
- Sisamud, K., Chatwattana, P., & Piriyaawong, P. (2023). The project-based learning using design thinking model via metaverse to enhance buddhism innovators. *Higher Education Studies*, 13(3), 10. <https://doi.org/10.5539/hes.v13n3p10>
- Solihudin, A., Fajar, I. N., Septian, G. D., & Wahid, J. H. (2019). Meningkatkan kemampuan pemahaman konsep ips menggunakan model project based learning untuk kelas V Sd. *Journal of Elementary Education*, 02(05), 5.
- Tarigan, H. G., Sebagai, B., & Keterampilan, S. (2017). *Henry guntur tarigan, berbicara sebagai suatu keterampilan berbahasa*, (Bandung: Angkasa, 2008), h. 17. 251. 251–256.
- Telaumbanua, S. (2022). The effect of project based blended learning towards negotiation text writing ability moderated by learning motivation. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 2327–2334. <https://doi.org/10.35445/alishlah.v14i2.1159>
- Thuan, P. D. (2018). Project-based learning: From theory to EFL classroom practice. *Proceedings of the 6th International OpenTESOL Conference 2018*, 327–339.
- Wanglang, C., & Chatwattana, P. (2023). The project-based learning model using gamification to enhance 21st century learners in Thailand. *Journal of Education and Learning*, 12(2), 99. <https://doi.org/10.5539/jel.v12n2p99>
- Zhou, C. (2020). *The application of project-based learning in English teaching*. 1063–1066. <https://doi.org/10.38007/proceedings.0000443>

Fajar Aldiansyanh & Utami Dewi

The effect of project based learning on middle school students writing ability in SMP IT Daarul Istiqlal Marindal I